

資料 3. 予備調査に係る質問表及びケニア国側回答

QUESTIONNAIRE
to
The Rural Planning Department, Ministry of Planning and National Development
from
the JICA Preparatory Study Team on
the Master Plan for the Integrated Rural Development Project in the BARINGO ASAL area

August 1998

Preface

This questionnaire is prepared by the JICA Preparatory Study Team of the development study on the Master Plan for the Integrated Rural Development Project in the BARINGO ASAL area ("the Study" hereafter) as to obtain basic and baseline information and data needed for the Study at the discussion we are going to have from 20/9/98. Will you be kindly requested to reply on the following items, and provide available documents for reference. The Study Team would also like to request additional data and information during our discussion in Kenya.

Attention to: The Rural Planning Department, Ministry of Planning and National Development

In order to facilitate our discussions on the Study on the Master Plan for the Integrated Rural Development Project in the BARINGO ASAL area, we kindly ask you to prepare the following information and data. We would like your comments, please prepare the information and data prior to our arrival. Should you have any questions or need clarification, please contact us through JICA Kenya Office.

Thank you very much in advance for your cooperation.

Please prepare the following information and data prior to our arrival. As for the items underlined in the following (related to statistics, official data and other information), we would very much appreciate it, if possible, if you could prepare them for us or let us make a copy of them for us to bring back to Japan for our reference.
And, we would like to get information and discuss items marked "*" on the preparatory study, so please remind it.

I. GENERAL INFORMATION AND BACKGROUNDS

1. Study Area*

According to your application for the Study, the vastness of the Study Area (6,200 square kilometers), and "the Study area is with its western side bordered by Tugen and Ilkamasha Hills and on the eastern side by Laikipia escarpment and adjoining hills up to the northern district boundary. The southern side is bordered by the catchment boundary of the Lake Baringo." And, "it comprises a major part of Mogotio, Marigat, Nginyang and Tangulbei divisions".

In the context of this Study, do you expect the Master Plan for integrated rural development be formulated mainly focusing on these areas, or are there any other areas e.g., whole Baringo District with high potentials which you consider should be newly developed and therefore be studied? If yes, please show the concrete Study Area.

2. Institutional structures *

Please describe the present institutional structures of your ministry (how has it been changed as a result of the restructuring process in the latest February?) both at the central level and District (including Division, Location, Sub Location) level. How many District-level (or Division, Location, Sub Location level, if any) offices representing related Ministries (MPND, MoA, MoWRD, MoPWH, MoRT, KWS, etc.) do you have in the Baringo district and where? If possible, please show them with Maps. What is the capacities and responsibilities of these offices?

3. Development Needs*

We would like to know whether you already have visions and ideas on how you will implement the project(s) which will be proposed in the course of the Study (especially, in terms of financial source). Hence, please answer the followings:

(1) Do you have any development strategies or plans for the Study Area? If yes, please prepare the materials.

- (2) What are the priorities for the development of the Study Area?
- (3) What is the most priority sector and the relationship with other priority sectors for the Study Area (justification of the request to Japanese Government)

4. Development Plans*

(1) Do you have any development plans (e.g., agriculture, water-supply, sanitation, education, income-generating, rural infrastructure, Environmental conservation, etc) at District level? If yes, please prepare the materials.

(2) If you do not have such development plan in writing, please answer the following questions, on national-level basis as well as on the District level basis.

- 1) What are the main objectives of those development?
- 2) What are the constraints on those development?
- 3) What fields or items do you place priorities for development, and for what reasons?
- 4) Which areas in the Baringo District are you putting emphasis for development, and why?

5. Institutional Framework*

(1) Which ministries or agencies are involved in rural developments such as agriculture, water resource development, sanitation, general health care, education, income-generating, environmental conservation? What kind of roles do they play in which areas?

According to the Terms of Reference, Ministry of Agriculture (former, Ministry of Agriculture, Livestock Development and Marketing=MOALD), Ministry of Water Resource Development (Ministry of Land Reclamation, Regional and Water Development=MOLRRWD), Ministry of Public Service and Housing (MOPWH), Ministry of Research and Technology (former Ministry of Research, Technical Training Technology=MORTTT), Kenya Wildlife Service (KWS) are mentioned as collaborating organizations, but we think that the following organizations can be collaborating organizations:

- 1) Ministry of Education Human Resource Development
- 2) Ministry of Natural Resource
- 3) Ministry of Health
- 4) Ministry of Local Authorities
- 5) Ministry of Land and Settlement
- 6) Ministry of Co-operative Development
- 7) Ministry of Home Affairs, National Heritage, Culture and Social Services
- 8) Ministry of Environmental Conservation
- 9) Ministry of Rural Development

Please tell us the possibility which ministries and agencies will be, or should be involved to carry out the Study?

And tell us NGO (Care Kenya, Action Aid, Kenya Water for Health Organization, Canadian Hunger Foundation, etc.) which will be, or should be involved to carry out the Study also.

- (2) Do you foresee any possible problems in coordinating these agencies? If so, what would be the solutions?
- (3) To what extent are the local governments either at the District level including Division, Location, Sub Location level involved in rural development in the Baringo District?

6. Other similar Programme or projects in or around the Study Area

(1) Names, backgrounds and activity reports*

(2) Impacts

(3) Lessons and problems

II. RURAL SOCIETY

1. Socio-Economic Situation of the Study Area (Please provide the latest statistics, if available)

(1) Administrative Divisions*

(2) Population (men and women), number of households, ethnicity, and religions (language used) of each Division, Location, Sub Location in the Study Area.*

(3) Characteristics of livelihood system of the people (major economic activities) and major off-farming activities currently conducted and possibilities*

(4) Working population in the different sectors (agriculture and other sectors)

(5) Migration (number of immigrants and emigrants, areas, years, gender differences)

(6) Population increase rate (area specifics) and problems

(7) Characteristics of household income (income per year, income sources, expenditures, area differences, gender differences)

2. Land Tenure

(1) Land tenure systems (traditions and laws) including the Land Reform Law*

(2) Impacts (positive and negative) of land tenure system on development of the Study Area*

(3) Land holding size (area specifics)

(4) Land inheritance systems (traditions and laws)

3. Social Status of the Baringo district (specifically in the Study area)

(1) Education (literacy rate, attendance rate to school, drop-out rate, ratio of students/teachers, numbers and kinds of schools, gender differences) (please give us the data, if available)

(2) Health and sanitation (birthrate, maternal mortality rate, child and infant mortality rate, numbers and kinds of health care facilities, ratio of doctors and nurses/population, availability of medicines, epidemics, access to clean water, availability of toilet, etc.) (please give us the data, if available) *

(3) Communication (road networks and conditions, means of transportation, means of communication within the village or with other areas, etc.)*

(4) Housing (prevail materials used and conditions, average number of residents per house, etc.)

(5) Energy supply (availability of electricity, kinds and conditions of fuel and availability)

4. Village*

(1) Existing village organizations, system of selection of authority (in general)

(2) Decision making process (in general)

(3) Information dissemination process (in general)

(4) Conflict within the village or with other villages

(5) Conflict resolution mechanisms

- (6) History of villages (establishment, disasters, development activities, etc.)
- (7) Communal works (kinds, systems, benefit, penalties, etc.)
- (8) Mutual help system (in case of no land, food, or money)
- (9) Survival strategies (common practices, emergencies)

5. Gender Issues

- (1) Division of labor and responsibilities in household
- (2) Economic status (possession and control of assets, legal rights, inheritance system)
- (3) Social condition (educational status, health status, food intake, relationships within household or with other households, communal participation, etc.), especially in the Debub Zone.
- (4) Political situations (political participation, women representatives, influence of women on the management of households and villages) in general in the Baringo district.
- (5) Migration of female-headed households (situation, problems) in general and specifically in the Debub Zone

6. Social Impact Assessment*

- (1) Do you have any policy or regulations to assess and mitigate possible social impacts of new development Programme/projects on people and areas?
- (2) Examples of other Programme/projects (in terms of social impact)

III ENVIRONMENT

1. Legislation and Administration

- (1) Do you have laws / guidelines on Environmental Impact Assessment (EIA)?
- (2) Which ministries or agencies are involved in the environment-related matters, and which is the leading agency?
- (3) Do you have any policy and legislations related to natural resources utilization, management and conservation?

2. Natural Environment

- (1) Vegetation map (please make it available to us, if possible)*
- (2) Areas affected by soil erosion and countermeasures for soil erosion (please specify in the map)
- (3) Please briefly describe the present conditions of environmental degradation (e.g. desertification, deforestation) and countermeasures being taken (please specify in the map).
- (4) History of natural disasters
- (5) National parks and conservation areas (please specify in the map)
- (6) Location of environmentally vulnerable areas (please specify in the map)
- (7) Species of valuable animals and plants in the area
- (8) Distribution of important landscape or scenery for tourism or religion

4. Environmental Pollution

Have you identified any environmental pollution in the Baringo district (e.g. air pollution, water

pollution)? If yes, what kind and where?

5. Other information

(1) Do you have any environmental study / investigation report and data related to the Baringo district?

(2) Are there any environmental NGOs active in or around the Study Area?

IV. AGRICULTURE

1. Land Use*

Please explain the land use of the Study area with supporting data.

2. Soil Conditions

(1) Do you have any data or maps concerning soil conditions? If available, please prepare it by our arrival.

(2) Are there any constraints on agricultural production in terms of soil conditions?*

3. Farm Household Economic Conditions

(1) Number of farm household and population dependent on agriculture in the Baringo district and/or the Study area.

(2) Please give us a general idea of economic conditions of an average farm household in the Baringo district and/or the Study area. If you have such statistical data, please make it available to us.

- | | |
|--------------------------------------|---------------------------------------|
| 1) Size of farmland tenure | 2) Size of farmland under cultivation |
| 3) Number of family | 4) Agricultural income per annum |
| 5) Non-agricultural income per annum | |

(3) Are there any differences between economic conditions of farm household and those engaged in non-agricultural sectors?

(4) What crops do farmers consider to be profitable? Are those crops consistent with the recommendations by the Government? If not consistent, please specify the reasons.

(5) Can farmers cultivate crops which they consider to be profitable by themselves? If not, please give the reason.

4. Agricultural Production

(1) Please give us the data of planted (or harvested) area, production amount and yield per hector of the following major crops for the Baringo district and/or the Study area, for the year of 1994, 1995, 1996 and 1997.

- 1) Cereals (sorghum, millet, maize, wheat, etc.)
- 2) Pulses
- 3) Vegetables
- 4) Fruits and berries (including ones for processing)
- 5) Nuts
- 6) Beverages (coffee and tea)
- 7) Fibrecrops (cotton, etc.)

- 8) other (sunflower, etc.)
- (2) Please describe cropping patterns of major crops for the Baringo district and/or the Study area.
- (3) Are there any problems or constraints on farming practice in terms of the following?
- 1) Seed and variety 2) Fertilizer application 3) Weed control
 - 4) Disease and insects control 5) Harvesting
- (4) From whom do farmers learn farming techniques?
- (5) What kind of crops do you recommend farmers for increasing production? Are you taking any measures to promote production of those crops?

5. Livestock Production

(1) Please give us the data of number of livestock raising households and the number of livestock raised for the Baringo district and/or the Study area, for the year of 1994, 1995, 1996 and 1997.

- | | | | |
|-----------------|----------------|------------------------|-----------|
| 1) Dairy Cattle | 2) Beef Cattle | 3) Pigs | 4) Horses |
| 5) Sheep | 6) Goats | 7) Layers and broilers | |

(2) Please give us the data on the amount of production of meat, dairy products and hen eggs and shipment number of broiler for the Baringo district and/or the Study area, for the year of 1994, 1995, 1996 and 1997.

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|--------------|-------------|------------------|-------------|
| 1) Beef | 2) Pork | 3) Horse meat | 4) Mutton |
| 5) Goat meat | 6) Raw milk | 7) Drinking milk | 8) Hen eggs |
| 9) Broilers | | | |

- (3) Please give us a general idea of livestock farming practice of an average farmer
- (4) Are there any problems or constraints on livestock farming practice in general?
- (5) How important do you think is livestock farming development in the Baringo district and/or the Study area?

6. Import and Export of Agricultural Products

(1) Please give us the data on the amount of import and export and value of the following agricultural products for the year of 1994, 1995, 1996 and 1997.

- | | |
|--|---------------------------------------|
| 1) Cereals and cereal preparations | 2) Pulses and pulse preparations |
| 3) Vegetables and vegetable preparations | 4) Vegetable oils and their materials |
| 5) Fruits and berries and their preparations | 6) Nuts and nut preparations |
| 7) Beverages (coffee and tea) | 8) Fibre crops |
| 9) Live animals | 10) Meat and meat preparations |
| 11) Dairy products and birds' eggs. | 12) Animal oils and fats |

(2) Do you have the data on food self-sufficiency rate on calorie basis or on value basis?

7. Agricultural Materials (seed, fertilizer, chemicals and so on) and Machinery

- (1) Please give us a general idea of distribution channel for agricultural materials and machinery.
- (2) Please give us a general idea of agricultural machinery usage by an average farmer.
- (3) Do farmers have any difficulties or problems in obtaining, using or applying agricultural materials?
- (4) Do you have any laws, regulations or standards concerning production, distribution or usage of agricultural materials and machinery?

8. Post-Harvest Activities

(1) Processing

- 1) What kind of processing activities and processors are important for each agricultural product for the Baringo district and/or the Study area?
- 2) Are there any difficulties or constraints on processing agricultural products?
- 3) Do you have any plan to develop processing of agricultural products?
- 4) Do you have the data on the amount and value of production of processed food?

(2) Storage

- 1) What kind of storages are important for the Baringo district and/or the Study area?
- 2) Are there any difficulties or constraints on storage of agricultural products?
- 3) Do you have any plan to improve storage of agricultural products?

(3) Marketing and Distribution

- 1) Please give us a general idea of marketing and distribution channel for each agricultural product.
- 2) Do you have any wholesale market in the Baringo district and/or the Study area?
- 3) Please give us the data on market price and farm gate price of each agricultural product.
- 4) Are there any difficulties or constraints on marketing and distribution of agricultural products?
- 5) Do you have any plan to improve marketing and distribution of agricultural products?

9. Farmers Organization

- (1) Are there any farmers organizations based on laws or regulations? If any, please give us a general idea of their function, memberships, structures, activities and so on.
- (2) Are there any unofficial farmers organization whose activities are not based on laws nor regulations? If any, please give us a general idea of their function, memberships, structures, activities, etc.
- (3) Do farmers organizations play a role in distribution of agricultural materials and machinery and agricultural products?
- (4) Do you have intentions to foster or strengthen farmers organizations? If yes, please give us the reason and your plan to achieve this end.
- (5) Do farmers practice their farming in a collaborative manner?

10. Research and Development (R&D) Activities

- (1) What kind of Governmental, public or private organizations or institutions do you have in whole Kenya and in the Baringo district and/or the Study area, concerning R&D activities for agriculture?
- (2) What is the role of each organization or institution in R&D activities?
- (3) Are there any difficulties or constraints on R&D activities?
- (4) Do you have any development plan for R&D activities?

11. Agricultural Extension Activities

- (1) What kind of and how many extension workers do you have in whole Kenya and in the Baringo district and/or the Study area? Are there any qualifications for them?
- (2) Please give us a general idea of extension activities on a daily basis.
- (3) What kind of and how many organizations, stations or offices are involved in agricultural

extension activities?

(4) From whom and how do extension workers learn farming techniques for extension activities? Do you have any training courses for extension workers?

(5) Are there any collaboration activities between extension workers and R&D organizations?

(6) Are there any difficulties or constraints on agricultural extension activities?

(7) Do you have any development plan for agricultural extension activities?

13. Rural Credit

(1) Please explain us the kind of credit system which can be utilized by farmers for agricultural production and rural livelihood improvement.

1) Name of bank

2) Source of credit

3) Object and subject of loan

4) Conditions of loan (limit of loan, interest rates, term, etc.)

5) Procedure for loan

(2) Are there any difficulties or constraints concerning rural credit?

(3) Do you have any plans to develop rural credit?

V. AGRICULTURAL AND RURAL INFRASTRUCTURES

1. Do you have meteorological data (the location of observatories, temperature, rainfall, humidity, evaporation, hours of daylight) and how long has such observation been made?

2. Do you have hydrological data (the location of observatories, amount of river flow), ground water level, water quality, etc) and how long has such observation been made?

3. What kind of maps and aerial photos are available? What are their scales and when were they made?

4. What is the present condition of road networks (main roads, farm roads, community roads, etc.)?

5. Agricultural infrastructures

(1) Present conditions of existing irrigation and drainage facilities (size of irrigated areas, type of facilities, the year of constructions, drainage systems, etc.). If you have inventory list for irrigation and drainage facilities (for the Baringo district), please hand it to us.

(2) Who is the owner of irrigation facilities? How are irrigation facilities operated, and by whom? (payment of fees, existence of water users associations, etc.)

(3) Present conditions of other facilities or equipment by common ownership for agricultural practice, if any.

6. If you have any laws or regulations related to water resource development, please make it available to us.

7. Who bears the cost for water resource development and agricultural development? Do farmers bear

any cost (including maintenance fees), and if they do, what is the current system?

Socio-Economic analysis

- (1) Do you have any socio-economic analysis report or baseline survey in Baringo or some close areas? If any, would you provide those reports from household level to district level. Otherwise, give more information about those such as the date of publication, researchers, and contents.
- (2) Do you have any researcher in this field in your organization or the related organizations? If any,
 - 1) Do you have in-house researchers? If any, how many and in which division? How often and how do you communicate with them? What is their background?
 - 2) Do you utilize non-in-house researchers? If any, how many and for what purpose? How often and how do you communicate with them? And where do they belong to and what is their background?
 - 3) To what kind of project are the analysis and reports reflected ?

Relationship with some other sectors

- (1) How do you see NGOs' activities especially in Baringo?
 - 1) Do you have any activity report of NGOs? If any, would you provide them. If no, would you give information such as their activities, approaches, financial resources, staff and resource allocation?
 - 2) How and how often do you communicate with NGOs?
 - 3) Is there any coordinating body?
 - 4) What is difficulty to work with other organization?
- (2) Is there any other organization such as universities, religious organizations and private companies, for rural development especially in Baringo?
 - 1) Which organization? Give us more information of its system, financial resources, staff and resource allocation.
 - 2) What kind of activities and approaches do the organizations take ?
 - 3) How often and how do you communicate each other?
 - 4) What is difficulty to work with other organization?

Social Dimensions of Development(SDD)

- (1) Is SDD being taken place? Are District SDD Project profiles done? Which stage of SDD is being done?
- (2) How are members of District Focus for Rural Development Strategy(DFRD) chosen? How is budget allocation?

QUESTIONNAIRE ON MASTER PLAN FOR INTEGRATED RURAL DEVELOPMENT
PROJECT IN BARINGO ASAL AREA.

I. GENERAL INFORMATION AND BACKGROUND

1. Study area = 6,200 KM²

2. Institutional structures

2) We do not foresee any difficulties :- co-ordinating these agencies

3) Local governments are fully involved in the rural development of Baringo District. Baringo County Council plays a major role in development. It has initiated many projects in the ASAL areas especially related to water and education.

4) Ministry of Planning and National Development does not have offices in the area of study.

Ministry of Agriculture, Works, and Water all have divisional offices and staff in Marigat, Tangulbei, Nginyang and Kolowa.

5) In 1996 some projects were funded sectorial by the Social Dimensions of Development but at the moment new projects have neither been funded nor initiated.

6) District Development Committee membership is as follows:-

- a) District Commissioner Chairman
- b) District Dev. Officer Secretary
- c) All Departmental Heads of all Ministries represented in the District.
- d) Members of Parliament
- e) District Branch Chairman of the Ruling Party
- f) Chairman of Local Authorities
- g) Clerks to Local Authorities
- h) Representatives of development related parastatals
- i) Invited (ad hoc) representatives of non-governmental development - related organizations and self-help groups.

3. Development needs

1) Yes. We have the District Development Plan 1997-2001 and the Annual Annex 1998/99.

2) Our priorities sectors in the study area are:-
Livestock Development
Water
Health

Education
Works

- 3) a) Livestock/Agriculture development ranks highest. This being a pastoral area, if we boost livestock production it will generate income for the community hence improve their living standards.
- b) Water development ranks second. This being an ASAL area, water is generally hard to get and women spend alot of time looking for water which is sometimes not fit for consumption. If we develop water resources, women will have more time and they will spend it on income generating activities. Also incidence of water borne diseases will be reduced.
- c) Health component rank 3rd. Inhabitants of ASAL regions are generally affected by different diseases.
- Children are generally malnourished and under weight. Health facilities are far away and not fully equipped.
- d) Education ranks fourth. Inspite of the sparse population, education levels are quite low and drop-out rates are very high.
- e) Roads/Infrastructure: This is poorly developed and in some areas, it is completely absent i.e. roads.

4. Development plans

1. Yes. We have the 1997-2001 District Development Plan and the 1997-98 Annex to the plan.

Attached find copies of the above document.

5. Relationship with other sectors

- (1) 1) NGO's in Baringo District are quite active and they collaborate and cooperate with other stakeholders and development oriented organizations.
- 2) No. We do not have any activity reports on NGO'S.
- 3) We communicate with NGOs on continuous basis. They are members of the Development Committees in the District.

The District Development Officer coordinates, monitors and evaluates all development activities in the district.

The District Commissioner is the Chairman of all Committees in the District.

4) Difficulties experienced.

- a) The DDC advises the NGOs on priority areas, but some end up concentrating their work in one region neglecting other areas.
- b) Duplication is another big problem. You find cases where two NGOs are operating and doing the same things.
- c) NGOs are not accountable to the government or community for their expenditure.

(2) Yes there are other Voluntary Agencies such as:

Kenya Freedom From Hunger Council (KFFHC)

The Kenya Freedom From Hunger Council is involved in development activities in the district in the areas of water development, livestock development, crop development, rangeland management, and gender and development. These activities are mainly concentrated in Kolowa, Nginyang and Tangulbei divisions and are aimed at enhancing food security in the region.

As pertains water development, KFFHC is involved in rehabilitation of dams and shallow wells, and spring protection. For crop development the focus is on demonstration of crop husbandry techniques, land preparation using donkeys, post-harvest management technology, promotion of fruits, and soil and water conservation among others.

World Vision International

A christian organization working with the poor and the disadvantaged in Kenya. In Baringo district, World Vision is collaborating with other NGOs, communities and the Government of Kenya in the implementation of identified community projects in Marigat, Kabarnet, Barwessa, Tangulbei and Nginyang. The projects undertaken by World Vision are in the sectors of health, education, agriculture, water, micro-enterprise development, and evangelism through child sponsorship system.

Catholic Diocese Of Nakuru

It is one of the Churches carrying out development activities in the district. These activities include provision of water, improvement of agriculture, health services, women activities, youth training, communication net working, and pastoral development activities.

A.I.C Loruk

Operates mainly in Loruk area and it's major activity is the construction of roof catchment tanks for schools. By 1990 the organization had constructed a total of 26 water tanks and six shallow wells with assistance from Unicef. The local community usually provides labour while the NGO provides materials. The organization is also assists women groups, pre-primary schools, the improvement of livestock, provision of chemicals for livestock and running of mobile health clinics

Morop Christian Children's Fund (CCF)

It started it's operation in the district in 1977. In 1991 the NGO started a Family Help Project. It's activities are sponsored by individuals from outside the country. This NGO procures uniforms and pays school fees for needy children while at the same time assisting their families to engage in income generating activities so that they can be self reliant in future. Other areas of involvement are water supply projects, construction of cattle dips and primary health care activities.

Anglican Church in Kenya

Began operating in the district in 1985 through the Baringo Community Development Project. CPK operates in Kabartonjo, Nginyang, Tangelbei and Marigat divisions where it addresses issues related to community health care using an integrated approach. So far the NGO has constructed 70 water tanks with the assistance of the CSD programme. Other areas of involvement are provision of building materials for nursery schools in Tangelbei and Nginyang, and assistance to groups in establishing income generating activities such as bee-keeping and basket weaving.

Kipsaraman Integrated Development Programme (KIDP)

Operates in Kipsaraman division. It's main objective is to help families improve on their nutrition status using the available resources. At present the NGO is also involved in agro-forestry, dairy and poultry activities, adult literacy, and water and sanitation. KIDP now has 14 health out-stations and it takes a leading role in curative and preventative health measures.

Inter-Aid

Is an NGO operating in the lowlands of the district. The organization has assisted in the construction of primary schools and is involved in afforestation efforts in conjunction with the line departments ie Forest and Agriculture.

Munamat Aldawa - Alislamiya (MDI)

Is one of the latest NGOs to start operating in the district. It began operating in Baringo in 1995.

The NGO aims at promoting education, health and water activities in East Baringo. At present the organization is about to complete the construction of a health centre in Kolowa division. On completion of this facility the NGO intends to put up a school.

II. RURAL SOCIETY

1.

1) Administrative Units by Division

Division	No. of Locations	No. of Sub-Locations
Nginyang	5	16
Marigat	8	18
Mukutani	3	6
Tangulbei	4	12
Kolowa	4	10
Mochongoi	3	7
Emining *	5	9
Kisanana *	7	20
Mogotio *	7	11
Total	46	109

* Divisions in Koibatek District

Source: District Commissioner - Baringo, 1996.

2) Study area Population estimates for 1998

DIVISION	Total	Male	Female
NGINYANG	27,511	13,235	14,276
TANGULBEI	19,317	9,293	10,024
KOLOWA	19,464	9,364	10,100
MARIGAT	51,485	25,629	25,856
MOCHONGOI	6,072	3,178	2,894
MOGOTIO **	64,765	32,649	32,116
TOTAL	188,614	93,348	95,266

** Includes Emining and Kisanana

- 3) Livestock production is the major economic activity of the people of the ASAL areas of Baringo district. Generally the main types of livestock reared are cattle, goats, sheep, camels and bees. Some of the livestock products are consumed while others are sold on the domestic market hence generating income for the farmers.

The people practise nomadic life style. They wander from place to place in search of pastures and water for their livestock. Crop farming is nevertheless practiced at a lower scale especially in Mochongoi (a recent settlement), Marigat (Perkerra Irrigation Scheme) divisions.

There is a great possibility of introducing small scale industries in the region such slaughter houses, honey processing plants, quarries e.t.c. This will provide employment to the people of the region and will also improve the economic status of the people.

- 4) Majority of the people derive their livelihood from the agricultural sector.
- 5) Statistics not available for study area
- 6) Population in the study area grows at an average annual growth rate of 3%. However Mochongoi and urban centres of Marigat and Mogotio have growth rate exceeding 5% annually. This can be attributed to the fact that Mochongoi has a recently established settlement scheme where people are still moving in and the latter two are fast growing urban centres.
- 7) Households average incomes

Average Households income per month in Kenya Shillings in the district are as below

NON-AGRICUTURAL INCOME		AGRICUTURAL INCOME		TOTAL
Wages/salaries/profits	Other non-agricutural income	Agricutural income	Crop income	
3623.8	2712.9	2924.4	271.9	9,533.0

Source: Welfare Monitoring Survey II, 1994, p138

8) Education

Pupil enrolment

DIVISION	BOYS	GIRLS	TOTAL	TEACHERS	Student/Teacher ratio
TANGULBEI	673	294	967	63	15
NGINYANG	560	361	921	57	16
KOLOWA	336	149	485	43	11
MARIGAT	3,398	3,299	6,697	359	19
MUKUTANI	719	552	1,271	69	18
MUCHONGOI	1,679	1,595	3,274	36	91
TOTAL	7,365	6,250	13,615	627	22

9) Health & Sanitation

Crude Birth Rate = 53.9

Maternal Mortality Rate = N/A

Child Mortality Rate = N/A

Infant Mortality Rate = 63

* N/A = Not Available

Marigat, Tangulbei, Nginyang and Kolowa Divisions have 1 hospital, 5 health centres and 22 dispensary.

The ratio of Doctors/population = 1:61925 and Nurses/population = 1:815. Medicines are readily available.

10) The study region has a road network of approx. 130 KM tarmac road, and weather roads making most of the villages accessible by road.

11) & 12) SEE POPULATION CENSUS 1989 ANALYTICAL REPORTS published by CENTRAL BUREAU OF STATISTICS--(1996)



Land tenure

1) Type of land tenure in Nginyang, Kolowa and Tangulbei is mainly communal ownership whereas Marigat and Mochongoi land is adjudicated, and registered by the Land registrar at the district.

III. Environment

III. Environment

1. Legislation and Administration

1. Yes. These are sectoral laws

There are 77 Acts in various Ministries and departments which deal with general and specific Environmental matters eg.

- Agriculture Act
- Water Act
- Public Act
- Chief Authority Act
- Traffic Act
- Public Health Act
- Forest Act
- Wildlife
- Forest Act
- Local Authority etc

We also have guidelines on Environmental impact Assessment although they have not been approved by parliament

In the Baringo we have intersectoral guidelines to be followed when implementing projects in the district. This is done by the District Environment Management Committee.

2. Ministries or Agencies involved in the Environmental related matters. These are all those ministries represented in the District environment Management Committee.

VIZ

- Office of President
- Environmental Conservation
- Natural resources - Forestry and Fisheries
- Agriculture and Livestock
- Water Resources
- Public Works
- Ministry of Health
- Lands
- Planning and National Development
- Rural Department
- Education
- Home Affairs and Social Services
- Cooperatives
- Local Authority

Agencies

- Kenya Wildlife Services

- National Museums
- County Council of Baringo
- Kabarnet Municipal Council
- World Vision
- KECA
- KARI/KEMFRI
- Arid Land Management
- Freedom from Hunger
- Kerio Valley Development Authority
- National Water Corporation

LEADING AGENCY

Ministry of Environment conservation - National Environment secretariat.

3. Yes. As mentioned in part 1 above (Ministerial Acts)

For example in Agricultural Act - these are policies guiding agricultural activities\output eg. Food policy

Water Policy (water use) - No person\is is /are allowed to abstract water without the authority of Ministry of water.

Chiefs\Administrative policy - One is not allowed to cut and or burn charcoal without the authority of the local chief or administration.

Forest policy - You cut trees and replant. Hence one slogan "Cut one tree but plant two or more".

2. NATURAL ENVIRONMENT

1. Map

2. (a) Areas affected by soil erosion

The areas which are most affected by soil erosion are the Arid and Semi-Arid areas which are found in Kerio Valley area, Marigat, Nginyang and Tangulbei. These areas are severely eroded.

Other areas that are moderately and strongly eroded are found on the Tugen Hills and the transitional areas that is the areas between the Tugen Hills and Semi-arid areas (See the Map)

- (b) Countermeasures of Soil Erosion

- (i) Increasing awareness of the importance of soil and water conservation among the farmers, staff, young people, local leaders and the general public.

- (ii) Conserves land, water resources in environmentally non-degrading, technically appropriate, economically viable and socially acceptable means
- (iii) Incorporate trees (Agro-Forestry) in the farming system to increase production and conserve the soil
- (iv) Control run-off from building compounds, and roads (Water - harvesting)
- (v) Improve the cover of perennial crops, grasses, and plant residues to reduce the damage from rainfall and runoff.
- (vi) Maintain and improve soil fertility and productivity through good land husbandry including the use of organic manures, appropriate tillage system and minimal use of mineral fertilizer.
- (vii) Lay out of both physical and biological soil and water conservation structures and measures on individual farms.
- (viii) Rehabilitation of badly eroded areas.

NB. All these measures are done through natural soil and water conservation programme approach.

3. Present conditions of Environmental degradation and Countermeasures

(a) Present Conditions

Population growth is possibly the single most important factor contributing to land degradation in Baringo District. Increasing land pressure has led to intensive cultivation of steep slopes and exploitation of ecologically fragile areas. Many people have shifted to drier areas and are exploiting them for food and fibre production using technologies, some of which are not suited to the prevailing ecological conditions.

The demographic change has led to:-

- Increase population density and cultivation pressure on marginal lands
- Shortened or eliminated fallows for the regeneration of exhausted land.

- Fragmentation and subdivision of production units.
- Social stratification and landless
- Migration
- More land degradation

(b) Countermeasures

These areas will not be able to produce enough food for the increasing population without instituting adequate soil and water conservation measures and good land husbandry. The need to produce enough food for an expanding population of the nature reasons for the government action to improve the conservation, utilization and management of natural resources.

The importance of increased yields should be stressed to the farmers as a motivating factor in conservation. Once the yields improve and farm income increase, then conservation will not only contribute to improve agricultural productivity on a sustainable basis, but also to better standards of living.

Farmers should be involve in identifying priorities, analyzing problems and devising solutions. Also the role of Women in development should be recognise and ensure their active participation in decision making. Agro-forestry practices should be encouraged where applicable by either planting trees on farm boundaries, in gullies, in woodlots, and along terrace embankments.

5. In the district we have two National parks namely Kamnarok national reserve and Lake Bogoria national reserve.

6. Environmentally Vulnerable areas

The following land forum or areas are vulnerable to moderate, severe, sheet erosion and extreme gully erosions.

- Mountains
- Hills
- Footbridges
- Plains
- Alluvial plains
- Bottom lands
- Valleys

7. In the national reseves we have the following animals: elephants, ostriches, flamingos, dickdick and gazelles.

4. ENVIRONMENT POLLUTION

Yes

(a) 1. Water Pollution - eg. Kabarnet Town - we have water pollution in the nearby rivers and streams occasioned by the discharge of untreated sewerage due to the fact that the town has no sewerage treatment plant. Also from Car washers who spill oils from the vehicles.

2. Air Pollution - from the towns Abattoir

3. Solid waste. The town has no proper dumping ground for the towns refuse

(b) Lake Baringo

1. Water pollution - from sewerage washed into the lake from Kampi Samaki and other settlement

2. Solid waste - from tourists

3. Car washers

4. Beach Boys

(c) Lake Bogoria - Solid waste by tourists

5. OTHER INFORMATION

1. Yes. Several reports eg

- Lake Baringo Report

- Kirdam

- Kimao

- Lake Kamnarok

- Jamaba - Roberts report on Marigat rehabilitation

2. Any Other NGOs

Yes.

- KECA. (L. Kamnarok)

- World Vision

- (L. Baringo).

OBJECTIVES: Start project and required baseline data on the Area which include Tangulbei, Mogotio, Marigat and Nginyang (ASAL).

IV. AGRICULTURE

1. Land use of the area of study.

- a) Land tenure
 - communal
 - group
 - individual
- b) Land use and pattern
 - Group ranching (7 in Marigat) - Area
 - Pastoralism
 - Bee keeping (the whole area)
 - Arable agriculture
 - a. rainfall area
 - b. irrigation area
 - Tourism

2. Soil Conditions

- soil/map data
- (i) Range management of Kenya Vol.II.6 will be provided (gtz) ch.1 page 1-12
- ii. Constraints
 - salinity (Kapkuikui scheme)
 - Poor water drainage (Njemps plains)
 - Low soil fertility (Nginyang, Kolba, Tangulbei, Hilly area)
 - Hard pans frequently formed

3. Farm Household economic condition

1. Farm household depending on Agriculture

Marigat 608
Tangulbei 2281
Nyinyang 5548

2. Economic condition (av) a. size of the farm land tenure

- Radat case
 - 50 acres with title deed
- b. Size under cultivation
 - # 3 - 10 acres Radat case
- c. Family size # 8
- d. Agri income/annum Sh. 24,000 - 36,000
- e. Non agri income - ref to dist so

3. It is not possible to compare.

- 178 -

7. Layer/broilers	18150	5465	5340	4746
* indigenous				
* Camels	7701	4010	4306	4290

PRODUCTION FIGURES

	1994	1995	1996	1997
Beef (kg)	1,811,474	811,220	913,210	893,752
Pork (kg)	-	200	-	-
Horse meat (kg)	-	-	-	-
Mutton (kg)	88,319	66,565	81,799	93,226
Goat meat (kg)	328,388	224,047	224,336	232,027
Raw milk (kg)	692,150	-	-	4,505,111
Drinking milk (kg)	-	-	-	-
Hen eggs (trays)	-	-	-	-
Broilers	-	-	-	-

iii. General idea of livestock farming practices of an average farmer.

Cattle - 30- 50 head	(For subsistence milk production and financial security, also sold for beef)
Goats - 60 - 80 head	(Financial security, food and culture)
Sheep - 20 - 40 head	(For food and financial security)
Camel - 10 - 15 head	(For food security)
Donkey - 4 - 15 head	(for draught and carrying water)
Poultry - 10 - 20	(for meat and eggs)
Bee keeping 60 - 100 local tugen hives	(financial security , food & culture)

Management.

- * Free range grazing in pastoral set up
- * Traditional hives and harvesting methods for bee keeping.

iv. Problems and constraints.

- Water availability and distribution
- Management of grazing areas is poor
- Disease incidences
- Poor marketing of produce.

5. Livestock farming development is the most important activity especially in Asal areas.

Total income 1997 from livestock products including wool, hides and skins = 169.14 Million as compared to the income of crops in 1997 =

6. I. No data
- II. computer printout available

7. Ref to Gtz Range Management handbook of Kenya Vol. II.6

8. I. Distribution channel for Agriculture material and machinery
- Stockists are not so accessible (far)
 - Agricultural machinery services are provided by a Government department on a cost sharing basis
 - There are few (external private tractors)
- II. average farmer uses machinery only during ploughing (1st)
- III. The main problem is in obtaining agricultural materials
- source and cost
- (IV) Yes, there are laws regarding production and distribution of Agricultural materials

9. Post harvest activities

- A. (i) Processing Processing Acridity
- (a) Cotton - Ginning
 - (b) Honey - Refining
 - (c) Groundnut - Oil extraction
 - (d) Beef - Canning
 - (e) Hides & Skins Tanning
 - (f) Fruits & reges Processed to add value
- (ii) Difficulties in processing Agricultural products
- (a) Management
 - (b) Capital
 - (c) Technology
- (iii) There are plans in the development of honey refinery and, hides and skins processing (District Development plans)
- (iv) None
- B. (i) Storage (a) Maize granaries
- (b) Honey storage
 - (c) Fruits/rege & other perishable storage
- (ii) Difficulties & constraints of storage of Agricultural products
- (a) Capital for construction
 - (b) pests
 - (c) Technology & skills of storing perishables
- (iii) Not documented

3. MARKETING & DISTRIBUTION

(I) General idea of distribution channels

- (a) Cereals - NCPB and local market centres
- (b) Cash crops - Marketing boards & middle men
- (c) Fruits - Middlemen and local market centres
- (d) reges - Middlemen and local market centres
- (e) livestock - Auction yards and local market/Middle men
- (f) Hides & skins - local bandas (Middle men stores)
- (g) Honey - Local honey refinery & middlemen
- (h) Milk - Local Co-operative Societies & dairy (Hawkers)
- (i) Eggs - Local market
- (j) Beef (meat) - Local butcheries

II No, wholesale markets except livestock auction yards

III Data on Market price Livestock (Disk)

IV Difficulties in marketing of Agricultural produce

- (a) Market information insufficient/unavailable
- (b) Infrastructure - Transport
- (c) Middlemen cartels
- (d) Protectionism makes penetration difficult

V. Yes, there are plans to improve the marketing and distribution of agricultural products ref omo

10. FARMERS ORGANIZATION

- (I) Yes
 - (a) Farmers marketing co-operatives - activities
 - (b) Farmers groups - Eg Group ranches - ranch management including marketing ranch grazing management etc
 - (c) Irrigation scheme committees - Ensure proper running of the daily scheme activities

Membership - beneficiaries, local community
Structure - Have committees with Chairperson, secretaries etc

- II Unofficial farmers organization
 - eg (a) Soil conservation catchment committee. Overseeing the activity of soil and water conservation within the specific area

- (b) loose groups formed during peak period of crop production eg weeding, harvesting etc.

III Yes, farmers organizations play a role in the distribution of Agricultural materials and machinery

IV There are intentions of fostering and strengthening farmers group. The reason is that this will enable them perform their functions and achieve their objectives. This increasing their bargaining power will be done through training in basis management practises and creating awareness.

V Yes, farmer, mostly do their farming in a collaborative manner

11. Research and Development (R & D) activities

(I) KARI (Kenya Agricultural Research Institute)

(II) Carry out research on specific farmers problem
Carry out adaptive trials

(III) Constraints
- Funding

(IV) None

12. Agricultural Extension Activities

(I) in thee study area total extension staff = 37 and must be certificate holders and above in agricultural training

(II) Farm visits, holding demos, field days, Baraza's etc

(III) Kind and how many

- | | | |
|-----------|-----|--|
| (a) NGO's | (1) | Catholic Diocese of Nakuru - Nginyang, Koloa and Tangelbei |
| | (2) | World Vision - Marigat, Tangelbei |
| | (3) | C.P.K - Mukutani |
| | (4) | Freedom from Hunger - Nginyang, Koloa, Tangelbei |

- | | | |
|----------|-----|----------------------|
| (b) GO's | (1) | M.O.A - Study area |
| | (2) | NIB - Marigat |
| | (3) | K.V.D.A - Mukutani |
| | (4) | A.L.R.M.P - Nginyang |

(IV) Yes, There are REL programme (Research Extension Liaison)

(V) Difficulties and constraints on extension

- (a) staff shortage at the area of study
- (b) Transport and communication is inadequate
- (c) Inadequately/appropriately trained staff in area of study

(majority are dip attendants and TA's who need to be upgraded.)

(VI) Yes, There is an annual work plan → *Check*

13. Rural credit

I	<u>Source of Credit</u>	<u>Credit Type</u>	<u>Conditions of loan</u>
-	AFC	Development Seasonal	Securities
-	Commercial banks	Development	Securities
-	NIB	Inputs and money	Must be a member and sell produce to board

(b) Loan procurement is source specific

II. yes, there's lack of security, high interest rate and low lending level for the rural farmer

III. At the National policy level only and not at the grassroots level

5. Agricultural infrastructures

(i) present conditions of existing irrigation - 27 smallholder irrigation schemes operational
2 centrally managed scheme

(ii) Owner of irrigation facilities:-

- Smallholder schemes - owned by farmers
- Centrally managed schemes - perkerra - NIB
Chemeron - KVDA

Irrigation facilities are operated on harambee basis by the owners (Farmers)

Six small-holder irrigation schemes have irrigation water users association which run the schemes

(iii) present conditions of other facilities

- Survey equipment - poor need replacement
- Agricultural machinery - Poor
- Design equipment / facilities - inadequate need addition

(iv) Are there any rural development projects in Baringo? Yes, ALRMP

Provides services to pastoral communities in East Baringo

(v) 5. Agricultural infrastructure District profile (irrigations)

9. Domestic Water & Sanitation

(a) Where People have water systems (Tangulbei & Chemolingot)

- (i) Borehole
- (ii) Tangulbei 850, Chemolingot 1350
- (iii) Yes - designed water supply limit 30lt/head/day human: 30lt/livestock unit indigenous, 3lt/head/day - (Shoals) shop and youth
- (iv) GOK/Community: - Members contribute for operational cost (Fuel and oils, Minor repairs) GOK provides technical advice staff and major repairs Community forms water supply committee in charge of normal operation of w/s

(b) Where people do not have water supply system

- (i) Water pans, sand water harvesting; seasonal rivers.
- (ii) None. The Community are pastoralist/nomads hence do not have permanent structure suitable for rain harvest.
- (iii) Yes.
- (iv) Community mobilization especially in sand water harvesting.
- (v) Water source and use are general managed secured by Community.

rules

rule 1495.00

9365 2087405

1. As per the photocopy - DIE pages 7 - 10

Sanitation

Percentage of houses that have toilets

- i. Marigat division 22%
- ii. Tangulbei division 17%
- iii. Nginyang Division 5%
- iv. Kolowa division 12%

10. PUBLIC FACILITIES.

Marigat division

	LOCATION	TYPE	IMPLEMENTING AGENCY
1.	Marigat	H/centre	GOK
2.	Kampi Samaki	H/centre	GOK
3.	Kiserian	Dispensary	NGO
4.	Marigat	Dispensary	NGO
5.	Loboi	Dispensary	GOK
6.	Ngambo	Dispensary	GOK
7.	Kokwa	Dispensary	NGO
8.	Loruk	Dispensary	GOK
9.	Kimalel	H/centre	NGO

Nginyang Division

1.	Nginyang	H/centre	GOK
2.	Chemolingot	H/centre	GOK
3.	Kapedo	Hospital	GOK
4.	Lomello	Dispensary	NGO
5.	Kositei	Dispensary	NGO
6.	Lomuke	Dispensary	NGO

Tangulbei Division

1.	Tangulbei	Dispensary	GOK
2.	Churo	Dispensary	NGO
3.	Amaya	Dispensary	NGO
4.	Orus	Mobile - ?	NGO
5.	Kokwototo	Dispensary	NGO
6.	Mukutani	Dispensary	GOK
7.	Komolion	Dispensary	NGO

Kolowa Division

1.	Kolowa	Dispensary	NGO
2.	Ngoron	Dispensary	NGO
3.	Barpello	Dispensary	NGO
4.	Maron	Dispensary	NGO
5.	Loiwat	Dispensary	NGO

11. DOMESTIC ENERGY

1. The people of this region use firewood as their predominant source of energy. The firewood is gathered and collected by the women and children from the bushes. How far Kerosine is also used but to a small extent and mostly for lighting.
2. Mostly they use the traditional "three stones" for cooking although in the recent past some NGO's have started introducing new energy saving kind of stove.
3. In the Arid lowlands the Rate of electrification is below average.

What type

? |

How many times and how long do power failures happen usually in a day in the study area?